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Application Serial No. 10/553,331
Reply to office action of February 11, 2009

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Docket: CU-4470

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) A system for transferring ~~a resource~~ electrical power within an area having a plurality of regions, the system comprising:
determining means operable to determine whether any one or more of the regions requires an amount of ~~the resource~~ electrical power;
requesting means operable to issue a request to at least one of the regions for the amount of ~~the resource~~ electrical power; and
transferring means operable to transfer the ~~resource~~ amount of electrical power from the at least one of the regions to the any one or more of the regions.
2. (currently amended) The system as claimed in claim 1, wherein the determining means is operable to determine whether any one or more of the regions requires the amount of ~~the resource~~ electrical power by determining whether a supply of the ~~resource~~ amount of electrical power is adequate for any one or more of the regions.
3. (currently amended) The system as claimed in claim 1, wherein the determining means is operable to determine whether any one or more of the regions requires the amount of ~~the resource~~ electrical power by determining whether a source from which the supply of the ~~resource~~ electrical power is obtained is operational.
4. (currently amended) The system as claimed in claim 2, wherein the determining means is operable to determine whether the supply of the ~~resource~~ amount of electrical power is adequate by determining whether a demand for the ~~resource~~ amount of electrical power is likely to exceed a maximum amount which the supply of the ~~resource~~ electrical power can provide.

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5. (currently amended) The system as claimed in claim 3, wherein the determining means is operable to ~~determine~~ determining whether the source is operational by monitoring a status of the source.
6. (currently amended) The system as claimed in claim 4, wherein the determining means determines whether the demand exceeds the maximum amount by monitoring an output of ~~the source~~ a source.
7. (original) The system as claimed in claim 6, wherein the determining means comprises an electronic monitoring device which is capable of collecting information about the status and the output of the source, the monitoring device being capable of processing the information in order to determine whether the demand exceeds the maximum amount and the status of the source.
8. (original) The system as claimed in claim 7, wherein the requesting means comprises a plurality of interconnected devices each of which is associated with a respective one of the regions, each of the devices being capable of issuing the request to any other devices which are connected thereto, thereby effecting issue of the request to the at least one of the regions.
9. (currently amended) The system as claimed in claim 8, wherein each of the devices is such that upon receiving the request they determine whether the respective one of the regions is capable of providing the amount of the ~~resource~~ electrical power.
10. (currently amended) The system as claimed in claim 8, wherein each of the devices is capable of issuing an indication that the respective one of the regions is capable of providing the amount of the ~~resource~~ electrical power.
11. (currently amended) The system as claimed in claim 10, wherein each of the devices is capable of determining whether the respective one of the regions has a surplus amount of ~~the resource~~ electrical power, to thereby effect determining of

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whether ~~the~~ respective one of the regions is capable of providing the amount of ~~the resource~~ electrical power.

12. (currently amended) The system as claimed in claim 11, wherein each of the devices is capable of determining whether a demand for ~~the resource~~ the amount of electrical power in the respective one of the regions is likely to exceed a maximum amount which the supply of the ~~resource~~ electrical power can provide to the respective one of the regions, to thereby effect determination of whether the respective one of the regions has the surplus amount of ~~the resource~~ electrical power.

13. (currently amended) The system as claimed in claim 12, wherein the transferring means comprises a plurality of links which are arranged in a mesh topology, and which can be used to transfer the ~~resource~~ amount of electrical power from the at least one of the regions to the any one or more of the regions.

14. (currently amended) A method for transferring ~~a resource~~ electrical power within an area having a plurality of regions, the method comprising the steps:

determining whether any one or more of the regions requires an amount of ~~the resource~~ electrical power using a determining means;

issuing a request to at least one of the regions for the amount of ~~the resource~~ electrical power using the determining means; and

transferring the ~~resource~~ amount of electrical power from the at least one of the regions to the any one or more of the regions ~~any one or more of the regions to the first of the regions~~ using a transferring means.

15. (currently amended) The method as claimed in claim 14, wherein determining whether the any one or more of the regions requires the amount of ~~the resource~~ electrical power comprises determining whether a supply of the ~~resource~~ amount of electrical power is adequate for the any one or more of the regions.

16. (currently amended) The method as claimed in claim 15, wherein determining

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whether the any one or more of the regions requires the amount of ~~the resource~~ electrical power comprises determining whether a source from which the supply of ~~the resource~~ electrical power is obtained is operational.

17. (currently amended) The method as claimed in claim 15, wherein determining whether the supply of ~~the resource~~ electrical power is adequate comprises determining whether a demand for ~~the resource~~ electrical power is likely to exceed a maximum amount which the supply of the ~~resource~~ electrical power can provide.

18. (currently amended) The method as claimed in claim 16, wherein determining whether the source is operational comprises monitoring a status of the ~~source~~ electrical power.

19. (currently amended) The method as claimed in claim 17, wherein determining whether the demand exceeds the maximum amount comprises monitoring an output of ~~the source~~ a source.

20. (original) The method as claimed in claim 19, wherein determining whether the source is operational and/or whether the demand exceeds the maximum amount comprises collecting information about the status and the output of the source, and processing the information in order to determine whether the demand exceeds the maximum amount and the status of the source.

21. (currently amended) The method as claimed in claim 14, wherein issuing the request comprises determining whether the respective one of the regions is capable of providing the amount of ~~the resource~~ electrical power.

22. (currently amended) The method as claimed in claim 14, wherein issuing the request comprises issuing an indication that the respective one of the regions is capable of providing the amount of ~~the resource~~ electrical power.

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23. **(currently amended)** The method as claimed in any one of claims 14 to 22, wherein transferring the ~~resource~~ amount of electrical power comprises arranging a plurality of links into a mesh topology, and using the links to transfer the ~~resource~~ electrical power from the at least one of the regions to the any one or more of the regions.

24. **(currently amended)** A decentralised ~~resource~~ electrical power network, the network comprising:

a plurality of geographically dispersed sub- networks each of which comprises a generator capable of generating a ~~resource~~ electrical power and a local distribution system arranged to distribute the ~~resource~~ electrical power to users;

a generator control system operable to: identify a first of the sub-networks that that is not capable of providing an amount of ~~the resource~~ electrical power required by the users;

and change an operational status of the generator of a second of the sub-networks so as to produce the amount of ~~the resource~~ electrical power; and

a backbone distribution system arranged to transfer the amount of ~~the resource~~ electrical power from the first of the sub-networks to the second of the sub-networks.

25. **(currently amended)** The decentralised ~~resource~~ electrical power network as claimed in claim 24, wherein the generator control system is operable to select the second of the sub-networks based on a proximity of the second of the sub-networks to the first of the sub-networks.

26. **(currently amended)** The decentralised ~~resource~~ electrical power network as claimed in claim 24 or 25, wherein the generator control system comprises:

a local control system;

a communication means; and

a global controller,

wherein the local control system is operable to collect status information about a status of the generator in each of the sub-networks and use the communication means

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to transfer the information to the global controller, the global controller being operable to process the status information in order to identify the first of the sub- networks and send status control data to the local control system via the communication means, the local control system being operable to process the status control data in order to effect the change in the operational status of the generator in the second of the sub-networks.

27. (currently amended) The decentralised ~~resource~~ electrical power network as claimed in claim 24, wherein the backbone distribution system comprises a plurality of ~~resource~~ electrical power transmission links arranged in a mesh topology.

28. (currently amended) A computer readable storage medium having Computer computer software stored thereon which, when executed by a computing system, allows the computing system to carry out the method as claimed in any one of claims 14 to 23.

29. (cancelled)

30. (new) A system for transferring electrical power within an area having a plurality of regions, the system comprising:

a backbone distribution system arranged so that the plurality of regions are electrically interconnected to each other;

a plurality of electrical generators, each of the generators being associated with a respective one of the plurality of regions, and also each of the generators being in electrical communication with the backbone distribution system;

determining means operable to determine whether any one or more of the regions requires an amount of the electrical power; and

requesting means operable to issue a request to at least one of the regions for the transfer of the amount of the electrical power over the backbone to the any one or more of the regions that requires the amount of the electrical power.

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31. (new) The system as claimed in claim 29, wherein each of the plurality of generators has a maximum electrical power capacity capable of meeting an expected demand in its respective region, and the determining means are operable to determine whether any one or more of the regions requires an amount of electrical power that exceeds the maximum electrical power capacity of the one or more regions respective generators.
32. (new) The system as claimed in claim 29, wherein the determining means comprises a plurality of local controllers, each controller being assigned to a respective region.
33. (new) A system as claimed in claim 31, wherein each controller comprises a respective sensor circuit, each sensor circuit being operable to monitor the demand placed on the generator associated with the respective assigned region.
34. (new) The system as claimed in claim 32, wherein each controller has a respective data processing circuit, and each respective sensor forwards information indicative of the demand placed on the generator associated with the respective assigned region to the respective processing circuit.
35. (new) The system as claimed in claim 33, comprising a local area network and the data processing circuits are capable of using the local area network.
36. (new) The system as claimed in claim 33, wherein the requesting means comprise at least one of the data processing circuits.